



NSW RURAL FIRE SERVICE

Department of Planning and Environment (Sydney Offices)
GPO Box 39
Sydney NSW 2001

Your reference: SSD-11437498
Our reference: DA20201207004583-EIS & DA
Exhibition-1

ATTENTION: Karl Okorn

Date: Thursday 24 June 2021

Dear Sir/Madam,

**State Significant Development - Electricity Generating Works
Request for comments - exhibited Environmental Impact Statement (EIS)
Broken Hill Battery Energy Storage System 74-84 Pinnacles Place Broken Hill NSW 2880, 58//DP258288**

Reference is made to correspondence dated 28/05/2021 seeking comments regarding the Environmental Impact Statement (EIS) currently being exhibited, for the above State Significant Development in accordance with the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service (NSW RFS) has reviewed the EIS and provides the following comments;

1. To the satisfaction of the hazard division of the Department of Planning, Industry and Environment (DPIE), a Fire Safety Study (FSS) is prepared consistently with the Hazardous Industry Planning and Assessment Papers (HIPAPs) detailing fire prevention and mitigation measures for all credible fire hazards (including grass and bush fires).
2. A Fire Management Plan (FMP) must be prepared in consultation with the NSW RFS Far West office located in Cobar. The FMP must include:
 - 24-hour emergency contact details including alternative telephone contact;
 - Site infrastructure plan;
 - Fire fighting water supply plan;
 - Site access and internal road plan;
 - Implementation of Asset Protection Zones (APZ) and their continued maintenance;
 - Location of hazards (Physical, Chemical and Electrical) that will impact on fire fighting operations and procedures to manage identified hazards during fire fighting operations;
 - Such additional matters as required by the Far West office (FMP review and updates).
3. A minimum asset protection zone (APZ) setback of 10.5 metres must be provided between the western boundary of the site (Lot 57 & 58 DP 258288) and the proposed Battery Energy Storage System (BESS).
4. The entire 'Project Area' must be managed in perpetuity to the standards of an inner protection area (IPA) as outlined in Appendix 4 of *Planning for Bush Fire Protection 2019*. When establishing and maintaining an IPA, the following requirements apply:

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Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

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- Tree canopy cover be less than 15% at maturity;
- Trees at maturity are not touching or overhang the building;
- Lower limbs are removed up to a height of 2m above the ground;
- Tree canopies are separated by 2 to 5m;
- Preference is given to smooth-barked and evergreen trees;
- Large discontinuities or gaps in vegetation are provided to slow down or break the progress of fire towards buildings;
- Shrubs are not located under trees;
- Shrubs do not form more than 10% of ground cover;
- Clumps of shrubs are separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
- Grass to be kept mown (as a guide, grass should be kept to no more than 100mm in height);
- Leaves and vegetation debris are removed; and
- NSW Rural Fire Service's document *Standards for asset protection zones*.

5. Any landscaping within the inner protection area must comply with Appendix 4 of *Planning for Bush Fire Protection 2019*. In this regard, the following principles are to be incorporated:

- A minimum 1-metre wide area, suitable for pedestrian traffic, must be provided around the immediate curtilage of the building;
- Planting is limited in the immediate vicinity of the building;
- Planting does not provide a continuous canopy to the building (i.e. trees or shrubs are isolated or located in small clusters);
- Landscape species are chosen to ensure tree canopy cover is less than 15% (IPA) at maturity and trees do no touch or overhang buildings;
- Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
- Use smooth bark species of trees species which generally do not spread fire up the bark into the crown;
- Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
- Avoid climbing species to walls and pergolas;
- Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
- Locate combustible structures such as garden sheds, pergolas and materials such as timber garden furniture away from the building; and
- Low flammability vegetation species are used.

6. The proposed BESS must be designed and constructed to withstand ember attack and radiant heat up to and including 12.5 kW/m² from a bush fire attack.

7. Any new Class 10b structures as defined per the *National Construction Code* must be non-combustible.

8. The proposed 'Access Road' must comply with the following standards for property access roads under Table 7.4a of *Planning for Bush Fire Protection 2019*:

- two-wheel drive, all-weather roads;
- the capacity of road surfaces is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes);
- minimum 4m carriageway width;
- provide a loop around the BESS;
- have passing bays every 200m that are 20m long by 2m wide, making a minimum trafficable width of 6m, at the passing bay;
- a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches;
- curves have a minimum inner radius of 6m and are minimal in number to allow for rapid access and egress;
- the minimum distance between inner and outer curves is 6m;
- the cross fall is not more than 10 degrees; and
- maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads.

9. The provision of water, electricity and gas must comply with Table 7.4a of *Planning for Bush Fire Protection 2019*.

For any queries regarding this correspondence, please contact Simon Derevnin on 1300 NSW RFS.

Yours sincerely,

Kalpana Varghese
**Supervisor Development Assessment & Plan
Built & Natural Environment**